

**Listing of Claims:**

Please AMEND the claims as indicated below:

Claims 1-5 (canceled)

Claim 6 (Currently amended). A communications network, in particular for telephony, comprising:

at least one operator;

a plurality of remote units designed to exchange signals with the operator and to exchange radio frequency (RF) signals with mobile terminals;

an interface unit inserted between the operator and the remote units, the interface unit having at least one input for receiving signals from the remote units and at least one output for sending signals to the remote units, the interface unit also being designed to exchange signals with the operator;

a first transmission support for connecting the interface unit to the remote units , the first transmission support being designed to support a main signal, the first transmission support having a first end connected to the interface unit input and at least a second end connected to the interface unit output, the main signal consisting of a plurality of secondary signals, each identified by a preset parameter value, each of the remote units receiving said main signal and being designed to process a secondary signal intended for it, each of the remote unites being able to select at least one secondary signal intended for it from said main signal according to the preset parameter value;

wherein each remote unit comprises:

a signal transmission block connected to the first transmission support for picking up at least one secondary signal from the main signal to be transmitted in the DL;

a signal reception block connected to the first transmission support for adding at least one signal received in the UL to the main signal;

an antenna attached to the signal transmission block and to the signal reception block for transmitting RF signals to the mobile terminals and for receiving RF signals from the mobile terminals The network according to claim 5,

wherein the signal transmission block comprises:

an optical filter element connected to the first transmission support for selecting, within the main signal, the secondary signal characterized by the parameter value associated with the remote unit;

preferably a first equalizer block connected downstream of the optical filter element;

a first electro-optical converter, for converting the optical signal from the interface unit into an electrical signal;

a first amplifier block connected to the first electro-optical converter;

a first RF filter for filtering the signals from the first converter.

Claim 7 (Currently amended). A communications network, in particular for telephony, comprising:

at least one operator;

a plurality of remote units designed to exchange signals with the operator and to exchange radio frequency (RF) signals with mobile terminals;

an interface unit inserted between the operator and the remote units, the interface unit having at least one input for receiving signals from the remote units and at least one output for sending signals to the remote units, the interface unit also being designed to exchange signals with the operator;

a first transmission support for connecting the interface unit to the remote units , the first transmission support being designed to support a main signal, the first transmission support having a first end connected to the interface unit input and at least a second end connected to the interface unit output, the main signal consisting of a plurality of secondary signals, each identified by a preset parameter value, each of the remote units receiving said main signal and being designed to process a secondary signal intended for it, each of the remote unites being able to select at least one secondary signal intended for it from said main signal according to the preset parameter value;

wherein each remote unit comprises:

a signal transmission block connected to the first transmission support for picking up at least one secondary signal from the main signal to be transmitted in the DL;

a signal reception block connected to the first transmission support for adding at least one signal received in the UL to the main signal;

an antenna attached to the signal transmission block and to the signal reception block for transmitting RF signals to the mobile terminals and for receiving RF signals from the mobile terminals The network according to claim 5,

wherein the signal reception block comprises:

a second RF filter for filtering a signal from the antenna;

a second amplifier block connected to the second RF filter;

a second electro-optical converter for converting an electrical signal from the second RF filter into an optical signal;

a second equalizer block connected downstream of the second electro-optical converter;

a signal insertion element for adding a signal received, characterized by the preset parameter value associated with the remote unit, to the main signal.

Claims 8-12 (canceled)

Claim 13 (Currently amended). A communications network, comprising:

at least one operator;

a first remote unit and at least a second remote unit, the remote units being designed to exchange signals with the operator and to exchange radio frequency (RF) signals with the mobile terminals;

an interface unit inserted between the operator and the remote units, the interface unit having at least one input for receiving signals from the remote units and at least one output for sending signals to the remote units, the interface unit also being designed to exchange signals with the operator;

a first transmission support for connecting the interface unit to the remote units , the first transmission support being designed to support a main signal, the first transmission support having a first end connected to the interface unit input and at least a second end connected to the interface unit output wherein the first remote unit has a first input directly connected to the interface unit output by the first transmission support and a first output, the second remote unit having a first input connected to the first output of the first remote unit by the first transmission

support and a first output directly connected to the interface unit input by the first transmission support, the main signal propagating in the first transmission support from the second end to the first end,

wherein the first transmission support basically consists of an optic fibre loop passing through each remote unit, the main signal being an optical signal propagating in the loop from the first remote unit to the second remote unit The network according to claim 12,

the network further comprising a second transmission support, having a first end connected to the interface unit input and a second end connected to the interface unit output, for supporting an auxiliary signal substantially identical to the main signal, the auxiliary signal propagating in the second transmission support from the second end of the second transmission support to the first end of the second transmission support.

Claim 14 (previously presented). The network according to claim 13, wherein the second remote unit has a second input directly connected to the interface unit output by the second transmission support and a second output, the first remote unit having a second input connected to the second output of the second remote unit by the second transmission support and a second output directly connected to the interface unit input by the second transmission support, the auxiliary signal propagating in the second transmission support from the second remote unit to the first remote unit.

Claim 15 (previously presented). The network according to claim 14, wherein the second transmission support basically consists of an optic fibre loop which passes through each of the

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remote units, the auxiliary signal being an optical signal propagating in the second transmission support from the second remote unit to the first remote unit.

Claims 16-19 (canceled).